

REMARKS

A. Claims 85 and 86

Claims 9, 61, 85 and 86 stand rejected as being anticipated by British application GB 217527. Claims 9 and 61 have been canceled.

Claim 85 is directed to a system useful in stabilizing a vessel. The vessel includes a first leg, a second leg, a third leg, and a platform coupled to the first, second, and third legs such that the platform may be raised or lowered along the first, second and third legs. The system comprises a brace coupled to each leg such that each brace forms an acute angle with the leg to which it is coupled and a least a portion of each brace is located directly beneath the platform; and an anchoring structure coupled to each brace. Each anchoring structure is configured to tension the brace to which it is coupled such that *each brace can be tensioned independently of the other braces*.

The Office does not address the independent tensioning configuration of each anchoring structure in the rejection on page 2 of the 2006 Action. In the “Response to Arguments” section of the Action on page 8, the Office states that “each brace can be tensioned independently since brace (8,9) and (20,25) each have their own respective hydraulic jacks[.]” This is not correct. Braces 8 and 9 are each coupled to the platform 1 with a chain stopper 12, not a hydraulic jack. Brace 20 is not connected to a hydraulic jack either; it is connected to left leg 2 at either location 26 or location 27. As for brace 25, the pressure cylinders 7 which the British Application discloses are connected between the upper part 6 and lower part 5 of each climbing and locking mechanism 4. Thus, while those pressure cylinders might play a role in adjusting the distance between the upper and lower parts of the climbing and locking mechanism 4, there is no teaching or suggestion that the pressure cylinders play any role in any tensioning of brace 25.

Furthermore, the British Application states that the braces are always tensioned together by raising the platform “a little bit upwardly” or “a little bit downwardly.” See page 1, lines 105-111, claim 8 and Abstract. Thus, anticipation has not been established for claim 85 and the rejection should be withdrawn.

The anticipation rejection of claim 86, which is a method claim, should be removed for the same reason as the anticipation rejection of system claim 85.

B. Claim 66

Claim 66 stands rejected as being obvious over the British application. The Office admits that the British Application is silent about lifting a leg that shifts horizontally as recited in independent claim 66, but claims it would have been obvious “to modify British document by lifting a leg that shifts horizontally since the tensioning means disclosed by British document affords this. The reason for doing so would be to ensure that he (sic) platform and (sic) move up and down.” 2006 Action at page 3.

Applicants do not understand what motivation the Office is asserting. See MPEP § 707.07(d) (“Where a claim is refused for any reason relating to the merits thereof it should be ‘rejected’ and the ground of rejection fully and *clearly* stated”) (emphasis added). Moreover, there is no factual support for the Office’s assertion. As the Federal Circuit explained in *Zurko*:

With respect to **core factual findings** in a determination of patentability, however, the Board cannot simply reach conclusions based on its own understanding or experience – or on its assessment what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings.

In re Zurko, 258 F.3d 1379, 1386 (Fed. Cir. 2001) (emphasis added); MPEP § 2144.03 (“It is never appropriate to rely **solely** on common knowledge in the art without evidentiary support in

the record as the principal evidence on which the rejection was based.”) (citing *In re Zurko*, 258 F.3d at 1386). The Office has not carried its burden of making a *prima facie* case of obviousness, and the rejection should be withdrawn.

C. Claim 84

Claim 84 stands rejected as obvious over the British application in view of Ward (US 3,093,972). Claim 84 is directed to a vessel. The vessel includes a platform; three legs coupled to the platform such that the platform may be raised or lowered along the three legs; a footing structure coupled to an end of one of the legs; and a flexible brace coupled at two different locations to the leg with the footing structure. The flexible brace forms an acute angle with that leg. One of the two claimed locations is on the footing structure. As an example of this, see brace 30 which is coupled as claimed to leg 14 in FIG. 32 of the present application.

The Office admitted that the British Application “is silent about the brace being coupled at two different locations on the footing structure.” 2006 Action at page 3. While this is true, the claim recites a flexible brace coupled at two different locations, *one* of which is on the footing structure (not necessarily *both* as stated by the Office). The Office then asserts that “Ward, Jr. teaches a brace being coupled at two different locations on a footing structure (see Figs. 5,8).” Again, the Office is mischaracterizing the claim. Moreover, the Office is wrong about Ward’s teachings. Neither FIG. 5 nor FIG. 8 of Ward show a *flexible* brace coupled at two different locations to a single leg to which a footing structure is coupled, where one of the locations is on the footing structure. In fact, FIG. 5 shows neither a flexible brace nor a footing structure. The Office has not carried its burden of making a *prima facie* case of obviousness, and rejection should be withdrawn.

D. Claim 1 and Its Rejected Dependent Claims

Claims 1, 2, 4, 12, 13, 15-20, 22 and 23 stand rejected as being obvious over the British application in view of Vincken (US 3,681,928), Petty 710 (US 4,936,710), Petty 239 (US 4,293,239) or Roach (US 4,378,178) and Thomas (US 5,224,798). Claim 3 stands rejected as being obvious over the British application in view of Vincken, Petty 710, Petty 239 or Roach and Thomas, and further in view of McGehee.

Claim 1 is directed to a system useful in stabilizing a vessel. The vessel includes a first leg, a second leg, a third leg, and a platform coupled to the first, second, and third legs such that the platform may be raised or lowered along the first, second and third legs using pinions driven by one or more motors. The system comprises a first brace coupled to the first leg at a first location along the first brace, the first brace forming an acute angle with the first leg. The first brace is coupled at a second location along the first brace to a winch driven by a winch motor capable of tensioning the first brace. The first and second locations along the first brace define a first brace length between them. At least a portion of the first brace length is located directly beneath the platform, and the winch motor is synchronized with the one or more motors such that tension in the first brace is maintained with the winch while raising or lowering the platform.

The British application teaches *away from* loading reversing wheel 22 or using it to tension a line, which is what the Office is suggesting where it advocates replacing reversing wheel 22 with a winch configured to maintain tension in cable 20. The inventor, who has a financial interest in this application, explains this in paragraph 5 of his August 1, 2005 declaration. None of the cited references cures this deficiency. For this reason alone, the rejections of claim 1 and its rejected dependents should be withdrawn.

Furthermore, the Office fails to clearly address the claim limitation that the claimed winch motor is *synchronized* with the one or more motors that can drive pinions to raise or lower the platform along the legs such that tension in the claimed first brace is maintained with the winch motor while raising or lowering the platform. The Office states that the British Application teaches “synchronizing movement of the platform with tensioning of the brace (see Abstract)” (2006 Action at p. 4), but does not state what the motivation is for replacing the tensioning mechanism in the British Application (which is moving the platform up and down, as the Abstract states; thus, this replacement *eliminates* the *synchronizing movement* on which the Office relies) with a winch motor, modifying the British Application so that platform movement can be achieved using one or more motors to drive pinions, and then *synchronizing* the winch motor with the one or more pinion-driving motors. None of the cited references cures this deficiency. For this additional reason, the rejections of claim 1 and its rejected dependent claims should be withdrawn.

E. Claim 40 and Its Rejected Dependent Claims

Claims 40, 41 and 43-51 stand rejected as being obvious over the British application in view of Wolff (US 5,390,618).

Claim 40 is directed to a vessel. The vessel includes a platform; three legs coupled to the platform such that the platform may be raised or lowered along the three legs; a flexible brace coupled to each of the three legs at a first location along each flexible brace, each flexible brace forming an acute angle with its respective leg; and an anchoring structure coupled to each flexible brace at a second location along each flexible brace, the first and second locations along each flexible brace defining a flexible brace length between them. At least one anchoring

structure is capable of achieving 40,000 pounds of tension in the flexible brace to which it is coupled.

The Office admits that the British application fails to disclose the claimed an anchoring structure, but points to a winch in Wolff capable of achieving the claimed tensile force and asserts that use of such a winch “would be an obvious design choice. It should be noted that depending on what amount of load one is interested in resisting, then the tensioning means would be chosen accordingly.” Action at page 6. The Office also states that “depending on certain parameters (such as waves and the like), one skilled in the art would provide the structure to be able to withstand 40,000 pounds of tension in the brace.” Action at page 9. This rejection lacks the requisite factual support and is based on hindsight.

The British application discloses no dimensions of any kind about any of the components of the jack up islands it concerns. Wolff is concerned with mooring vessels, not with tensioning braces connected to the legs of jack-up boats. Of course anchoring structures, such as winches, possessing the claimed capability exist. However, the Office cites no evidence that shows that those of ordinary skill in the art aware of the British application would have recognized the need for such an anchoring structure, especially where no sizes or loads are explained in the 257 Application. *See* Aug. 1, 2005 Kawasaki Decl. at ¶ 7; *see In re Nomiya*, 184 USPQ 607, 612-613 (CCPA 1975) (holding that it is improper to conclude that an invention is obvious absent evidence that one of ordinary skill would have recognized that an underlying problem existed). The knowledge of that need comes only from Applicant’s specification (page 35).

The Office’s approach is not supported by substantial evidence. As the Federal Circuit explained in *Zurko*:

With respect to **core factual findings** in a determination of patentability, however, the Board cannot simply reach conclusions based on its own

understanding or experience – or on its assessment what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings.

In re Zurko, 258 F.3d at 1386 (emphasis added); MPEP § 2144.03 (“It is never appropriate to rely **solely** on common knowledge in the art without evidentiary support in the record as the principal evidence on which the rejection was based.”) (citing *In re Zurko*, 258 F.3d at 1386).

Accordingly, the rejection of claim 40 and its dependents should be withdrawn.

F. Claim 42

The Office rejects claim 42 as being obvious over the British application in view of Wolff and further in view of Thomas, Hansen (US 4,063,426) or Hornsby (US 2,892,3140. Claim 42 is patentable for the same reasons as claim 40. Neither Thomas, Hansen or Hornsby cures the deficiencies of the previously-traversed combination. Therefore, the rejection should be withdrawn.

G. Claim 54 and Its Rejected Dependents

Claims 54, 55, 70 and 71 stand rejected as being obvious over the British application in view of Vincken, Petty 710, Petty 239, Roach or Wolff and Legleux (US 6,461,081). Claim 54 is directed to a method useful in stabilizing a vessel that has a platform and three or more legs coupled to the platform such that the platform may be raised or lowered along the legs. The method includes coupling a first brace to one of the legs; orienting the first brace at an acute angle with the leg to which it is coupled; and positioning at least a portion of the first brace directly beneath the platform. Pinions driven by one or more motors are used for the raising or lowering of the platform, and the method also includes coupling the first brace to a winch driven by a winch motor, and synchronizing the winch motor with the one or more motors such that tension in the first brace is maintained synchronizing the winch motor with the one or more

motors such that tension in the first brace is maintained at the winch while raising or lowering the platform.

The British application teaches away from replacing the reversing wheel 22 with a winch that maintains, as claimed, tension in a brace as explained above with respect to claim 1. *See* Aug. 1, 2005 Kawasaki Decl. at ¶ 5. Furthermore, the British application fails to support any motivation for adjusting tension in any of the lines/chains using anything other than platform. *See* page 1, lines 105-111. Even claim 8 on page 3 specifies “the tension members are tensioned by **moving the platform** with respect to the column after the tension members being connected and straightened.” (Emphasis added). Because of these teachings away, the rejections of claim 54 and its rejected dependents are overcome and should be withdrawn.

Furthermore, the Office’s statements that the claimed synchronizing would be an obvious design choice and that “[i]t is well within the skill of one of ordinary skill in the art to substitute equivalent parts for performing equivalent functions” is factually unsupported and based on hindsight. *See* MPEP § 2143.01.IV. (“A statement that the modifications of the prior art to meet the claimed invention would have been “well within the ordinary skill of the art at the time the claimed invention was made” because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references.”). As the Board once explained in a non-precedential decision, “It is not persuasive to just make up a rationale that might fit the circumstances, as the Examiner appears to have done, because the lack of factual support smacks of hindsight.” *In re Orlofsky*, Appeal No. 2000-0377 at page 10 (copy previously enclosed). There is no recognition in any of the cited references that such synchronization is needed. *See* Aug. 1, 2005 Kawasaki Decl. at ¶ 8; *see In re Nomiya*, 184

USPQ at 612-613 (holding that it is improper to conclude that an invention is obvious absent evidence that one of ordinary skill would have recognized that an underlying problem existed). Accordingly, the Office's approach is not supported by substantial evidence. As the Federal Circuit explained in *Zurko*:

With respect to **core factual findings** in a determination of patentability, however, the Board cannot simply reach conclusions based on its own understanding or experience – or on its assessment what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings.

In re Zurko, 258 F.3d at 1386 (emphasis added); MPEP § 2144.03 (“It is never appropriate to rely **solely** on common knowledge in the art without evidentiary support in the record as the principal evidence on which the rejection was based.”) (citing *In re Zurko*, 258 F.3d at 1386). For this additional reason, the rejections of claim 54 and its rejected dependents are overcome and should be withdrawn.

H. Conclusion

These remarks fully respond to all outstanding matters for this application. Applicant respectfully requests that the Office withdraw the current rejections and allow pending claims 1-4, 10, 12, 13, 15-20, 22, 23, 40-51, 54, 55, 67-68, 70-71, and 84-86. Should the Examiner desire to discuss this application in more detail by telephone, or if any additional concerns remain, the undersigned attorney may be reached at 512-536-3031 (voice), 512-536-4598 (fax), or by email at mgarrett@fulbright.com. Should any fees be required for any reason, the Commissioner is authorized to deduct the appropriate fees from Fulbright & Jaworski Deposit Account No.: 50-1212/DGSN:002US.

Respectfully submitted,

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